

**ABSTRACT**

An automatic quartz-tube leveling device for automatically measuring the leveling state of an optical-fiber preform on an on-line basis using a modified-chemical-vapor deposition (MCVD) technique is disclosed. A quartz tube is disposed in a horizontal supporting element such as a lathe. A measuring device is provided with a light-emitting device and a light-receiving device, interposing the quartz tube, for measuring an upper eccentric value and a lower eccentric value along a length of the quartz tube. A controller receives the measured upper and lower eccentric values from the measuring device, compares the measured values with predetermined reference values, and specifies a necessary leveling span of the quartz tube. A transfer device then moves to a necessary leveling span of the quartz tube to carry out leveling of the quartz tube, under control of the controller.